

IN THE CLAIMS

1. (currently amended) A method of screening for ~~therapeutic~~ agents that may be useful in the treatment of ~~a disease selected from hematological diseases, cardiovascular diseases, disorders of the peripheral and central nervous system, respiratory diseases, COPD, asthma, and genito-urological disorders~~ in a ~~mammal~~ human comprising the steps of:

- i) contacting a test compound with a human NPFF2 polypeptide *in vitro*,
- ii) detecting binding of said test compound to said NPFF2 polypeptide, and
- iii) identifying a test compound that binds to said NPFF2 as an agent that may be useful in the treatment of a hematological disease.

2. (currently amended) A method of screening for ~~therapeutic~~ agents that may be useful in the treatment of ~~a disease selected from hematological diseases, cardiovascular diseases, disorders of the peripheral and central nervous system, respiratory diseases, COPD, asthma, and genito-urological disorders~~ in a ~~mammal~~ human comprising the steps of:

- i) determining the activity of a human NPFF2 polypeptide at a certain concentration of a test compound or in the absence of said test compound *in vitro*,
 - ii) determining the activity of said polypeptide at a different concentration of said test compound, and
 - iii) identifying a test compound as a potential therapeutic agent useful in the treatment of a hematological disease if the activity of the NPFF2 polypeptide in the presence of the test compound is different than the activity of the NPFF2 polypeptide in the absence of the test compound,
- wherein the activity of the polypeptide results in an alteration of intracellular calcium.

3. (currently amended) A method of screening for ~~therapeutic agents that may be useful~~ in the treatment of ~~a disease selected from hematological diseases, cardiovascular diseases, disorders of the peripheral and central nervous system, respiratory diseases, COPD, asthma, and genito-urological disorders~~ in a ~~mammal~~ human comprising the steps of:

i) determining the activity of a human NPFF2 polypeptide at a certain concentration of a test compound in vitro,

ii) determining the activity of a human NPFF2 polypeptide ~~at~~ in the presence of a compound known to be a regulator of a NPFF2 polypeptide, and

iii) identifying a test compound as a potential therapeutic agent useful in the treatment of a hematological disease if the activity of the NPFF2 polypeptide in the presence of the compound known to be a regulator of a NPFF2 polypeptide is similar to than the activity of the NPFF2 polypeptide at the certain concentration of the test compound,

wherein the activity of the polypeptide results in an alteration of intracellular calcium.

4. (previously presented) The method of claim 1, wherein the step of contacting is in or at the surface of a cell.

5. (canceled)

6. (previously presented) The method of claim 1, wherein the step of contacting is in a cell-free system.

7. (previously presented) The method of claim 1, wherein the polypeptide is coupled to a detectable label.

8. (previously presented) The method of claim 1, wherein the compound is coupled to a detectable label.

9. (previously presented) The method of claim 1, wherein the test compound displaces a ligand which is first bound to the polypeptide.

10. (previously presented) The method of claim 1, wherein the polypeptide is attached to a solid support.

11. (previously presented) The method of claim 1, wherein the compound is attached to a solid support.

12-24. (canceled)

25. (currently amended) Method for the preparation of a pharmaceutical composition useful for the treatment of ~~a disease selected from hematological diseases, cardiovascular diseases, disorders of the peripheral and central nervous system, respiratory diseases, COPD, asthma, and genito-urological disorders~~ in a ~~mammal~~ human comprising the steps of

i) identifying a regulator of human NPFF2,

ii) determining whether said regulator ameliorates the symptoms of a ~~disease selected from hematological diseases, cardiovascular diseases, disorders of the peripheral and central nervous system, respiratory diseases, COPD, asthma, and genito-urological disorders~~ in a ~~mammal~~ human; and

iii) combining of said regulator with an acceptable pharmaceutical carrier.

26. (canceled)

27. (new) The method of claim 2, wherein the step of contacting is in a cell-free system.

28. (new) The method of claim 2, wherein the polypeptide is coupled to a detectable label.

29. (new) The method of claim 3, wherein the step of contacting is in a cell-free system.

30. (new) The method of claim 3, wherein the polypeptide is coupled to a detectable label.